

IN THE SPECIFICATION:

Please replace the paragraph beginning at page 36, line 26, with the following rewritten paragraph:

Select embodiments comprising such approaches enable the use of a broad array of sophisticated algorithms to compare, analyze, and cluster gene and protein sequences. Many programs performing this task are known to those of ordinary skill in the art, such as for example, the program Phylip, available at <http://evolution-genetics.washington.edu/phylip.html>, and other packages listed at <http://evolution-genetics.washington.edu/phylip/software.html>. However, select embodiments according to the present invention can comprise a technique of statistical classification, statistical clustering, distance based clustering, linear and non-linear regression analysis, self-organizing networks, and rule-based classification.

Please replace the paragraph beginning at page 47, line 13, with the following rewritten paragraph:

Resulting sequences were clustered using an AlignX module commercial software package Vector NTI (<http://informaxinc.com>), which uses a Neighbor Joining algorithm for sequence clustering.